

WHAT IS CLAIMED IS:

10083280-022502

1. A radio transmission method for transmitting a packet from a radio transmission apparatus serving as an information transmitter to a radio transmission apparatus serving as an information receiver, returning receipt acknowledging information of a received packet from said radio transmission apparatus serving as said information receiver to said radio transmission apparatus serving as said information transmitter after transmission of information, and retransmitting an unreceived packet from said radio transmission apparatus serving as said information transmitter to said radio transmission apparatus serving as said information receiver in a wireless network, said wireless network being formed with a plurality of transmission apparatus serving as communication stations, said radio transmission method comprising the steps of:

on a side of said radio transmission apparatus serving as said information transmitter,

setting a predetermined transmission frame cycle;

presetting a frame cycle for retransmission; and

automatically retransmitting only a packet whose receipt acknowledging information has not been received on arrival of said frame cycle for retransmission.

2. A radio transmission method for transmitting a packet from a radio transmission apparatus serving as an information transmitter to a radio transmission apparatus serving as an information receiver, returning receipt acknowledging information of a received packet from said radio transmission apparatus serving as said information receiver to said radio transmission apparatus serving as said information transmitter after transmission of information, and retransmitting an unreceived packet from said radio transmission apparatus serving as said information transmitter to said radio transmission apparatus serving as said information receiver in a wireless network, said wireless network being formed with a plurality of transmission apparatus serving as communication stations, said radio transmission method comprising the steps of:

on a side of said radio transmission apparatus serving as said information transmitter,

setting a predetermined transmission frame cycle;

entering a sequence number of a last packet transmitted in said frame cycle as a transmission pointer value of said frame; and

referring to the transmission pointer value of a frame cycle for retransmission in each said frame cycle

and automatically retransmitting only a packet whose receipt acknowledging information has not been received.

3. A radio transmission method according to claim 1, wherein said frame cycle for retransmission is preset to an arbitrary frame cycle depending on size of an asynchronous transmission area available for asynchronous transmission in a radio transmission line allowing band-reserved transmission or band-secured transmission.

4. A radio transmission method according to claim 1, wherein the predetermined number of retransmissions are set, and then retransmission is made said number of retransmissions.

5. A radio transmission method according to claim 1, wherein a frame cycle for discarding unreceived packets is preset, and a packet whose receipt acknowledging information has not been returned until said frame cycle is discarded.

6. A radio transmission method according to claim 2, wherein the sequence number of the last packet transmitted in said frame cycle is entered as the transmission pointer value of said frame; and the transmission pointer value of a frame cycle for discarding packets is referred to in each said frame cycle and a packet whose receipt acknowledging

information has not been received is discarded.

7. A radio transmission apparatus for transmitting information in a wireless network, said wireless network being formed with a plurality of communication apparatus serving as communication stations, said radio transmission apparatus comprising:

packetizing means for packetizing asynchronous information into packets as predetermined information units on said wireless network;

transmitting means for transmitting said packets under predetermined access control;

receiving means for receiving receipt acknowledging information from a radio transmission apparatus serving as an information receiver;

frame cycle setting means for setting a predetermined transmission frame cycle;

timing means for timing said frame cycle;

retransmission frame cycle setting means for presetting a frame cycle for retransmission; and

retransmitting means for automatically retransmitting only a packet whose receipt acknowledging information has not been received on arrival of said frame cycle for retransmission.

8. A radio transmission apparatus for transmitting

information in a wireless network, said wireless network being formed with a plurality of communication apparatus serving as communication stations, said radio transmission apparatus comprising:

packetizing means for packetizing asynchronous information into packets as predetermined information units on said wireless network;

transmitting means for transmitting said packets under predetermined access control;

receiving means for receiving receipt acknowledging information from a radio transmission apparatus serving as an information receiver;

frame cycle setting means for setting a predetermined transmission frame cycle;

transmission pointer recording means for recording a sequence number of a last packet transmitted in said frame cycle as a transmission pointer value of said frame;

timing means for timing said frame cycle;

retransmission frame cycle setting means for presetting a frame cycle for retransmission; and

retransmitting means for referring to the transmission pointer value of said frame cycle for retransmission in each said frame cycle and automatically

retransmitting only a packet whose receipt acknowledging information has not been received.

9. A radio transmission apparatus for transmitting information in a wireless network, said wireless network being formed with a plurality of communication apparatus serving as communication stations, said radio transmission apparatus comprising:

packetizing means for packetizing asynchronous information into packets as predetermined information units on said wireless network;

transmitting means for transmitting said packets under predetermined access control;

receiving means for receiving receipt acknowledging information from a radio transmission apparatus serving as an information receiver;

frame cycle setting means for setting a predetermined transmission frame cycle;

timing means for timing said frame cycle;

discarding frame cycle setting means for presetting a frame cycle for discarding packets; and

discarding means for discarding a packet whose receipt acknowledging information has not been received on arrival of said frame cycle for discarding packets.